2. Notice of a New Polyzoon (*Hippuraria egertoni*).

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[Received November 26, 1873.]

(Plate V.)

The subject of the present communication is so peculiar in its conformation and in several respects so widely different from any other Polyzoon with which I am acquainted, that it seems desirable that some notice of it should be placed on record, although I am unable from want of materials to give a full account of its structure. This can only be made out from the examination of fresh or perfect specimens that have been preserved in spirit.

The only specimen at present available is not sufficient for the purpose, owing to its having been dried and reexpanded. I am indebted for it to Sir Philip Egerton, who discovered the species growing upon the carapace of a *Gonoplax angulatus* dredged up at Berehaven in the course of last summer. It will, no doubt, when once made known, be found in sufficient abundance; and the examination of it, in the living or recent state, will well reward the observer.

The specimen, which is preserved in the British Museum, consists apparently of only a portion of a larger growth. It is about a $\frac{1}{4}$ of an inch in length, and consists of a central tubular stem upon which are four nodular enlargements at nearly equal distances apart. From each of these nodes spring on all sides numerous slender transparent tubes, about 0″·13 long, each of which supports at the extremity a pyriform *zoœcium* about 0″·04 in length.

The central stem is a hollow, thick-walled, chitinous tube, obscurely jointed between the nodosities (Plate V. fig. 2). The latter, in the present condition of the specimen, are quite opaque; and consequently it is impossible to make out their exact relations to the tubular stem, or the precise mode of origin of the celliferous tubules which spring from them.

The tubules or peduncles, as they may be called, of the zoœcia are slender and very transparent, about $\frac{1}{500}$ of an inch in diameter, and smooth on the exterior. Internally they exhibit what appears to be an irregularly spiral filament; but the real nature of this structure has yet to be ascertaind. The zoœcia are seated at the extremities of the tubules, to which they appear to be connected by a joint. I have been unable to make out whether there is any communication between the tube and the cavity of the zoœcium.

The *zoœcia* or cells are of an elegant pyriform shape, somewhat gibbous on one side, which may be termed the dorsal, whilst on the opposite or anterior the zoœcium at first sight appears to be furnished with a wide aperture closed with a thin membrane similar to that which is met with in very many of the Cheilostomata (as *Bicellaria* &c.), in which area is placed the true mouth with its movable lip. Nothing of the kind, however, appears to exist in *Hippuraria*; and the apparent aperture represents the outline of a distinct smaller compartment of the zoœcium, placed as it were on

the front of the larger or hinder one, and about half its length. The external walls of both compartments are very thin and transparent, and marked with fine irregular transverse lines.

The orifice through which the polypide is protruded appears to belong chiefly, if not entirely, to the smaller compartment, in which may be perceived a dark opaque body probably representing the contracted remains of the polypide, from which in several of the zoœcia the usual contractile, muscular fasciculus proceeds. The two compartments seem to be separated by an obliquely vertical septum, in which may be obscurely perceived a circular opening*, through which the retractile muscle appears to pass to the bottom of the hinder compartment. Besides these structures there may be seen traces of other, probably muscular, bands in the larger compartments; but the whole of the internal economy has yet to be satisfactorily made out.

In most of the zoœcia the remains of the protruded polypide may still be seen projecting from the apical orifice. I have been unable to discern any fringe of setæ, but have no doubt that it will be found that, when the polypide is protruded, its base is surrounded with at least a membranous fringe, as is the case in many of the Ctenostomata.

Some idea of the appearance presented by the Polyzoon when alive may be formed from fig. 3 in the accompanying Plate, taken from a sketch made by Sir Philip Egerton. From this it would seem that the zoœcium, at any rate on occasion, is capable of being flexed to a right angle upon its peduncle, although in the dead specimen all the zoœcia are continued in a straight line with it.

For this interesting production I propose the name of *Hippuraria egertoni*, with the following diagnosis:—

Suborder Ctenostomata.

Fam. Hippurariadæ, n. fam.

Gen. Hippuraria, n. g.

Stem jointed, nodular, whorls of celliferous tubules arising from the nodes. *Zoœcia* two-celled.

Sp. Hippuraria egertoni, n. sp.

The only species.

Hab. Berehaven, Ireland (parasitic on *Gonoplax angulatus*).

DESCRIRTION OF PLATE V.

Fig. 1. *Hippuraria egertoni*, nat. size.
2. Enlarged about ten times.
3. Appearance when alive.
4. Anterior aspect of zoœcium.
5. Posterior aspect of zoœcium.
6. Portion of the central stem between two nodes.

* This opening may probably represent that by which the zoœcia in the other Ctenostomata communicate with the tube from which they spring.